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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,852	02/18/2004	Shinji Yamamori	Q79958	9460

65565 7590 10/17/2007

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2100 PENNSYLVANIA AVE. NW
WASHINGTON, DC 20037-3213

EXAMINER	
TOTH, KAREN E	
ART UNIT	**PAPER NUMBER**
3735	

MAIL DATE	DELIVERY MODE
10/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/779,852	YAMAMORI ET AL.	
	Examiner	Art Unit	
	Karen E. Toth	3735	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,9-12 and 17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,9 and 17* is/are rejected.

7)☒ Claim(s) *10-12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 9, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamamori (US Patent Application Publication 2002/0122746).

Regarding claim 1, Yamamori discloses an airway adapter adapted to be attached to a carbon dioxide sensor's light emitter comprising an airway case (element 1) that is adapted to be disposed below a patient's nostrils (figures 3, 10, 11) and has an airway passage configured to extend across an optical axis of a light beam emitted from the sensor's light emitter at a position between the mouth and nostrils of the patient (element 4); and a mouth guide, adapted to be disposed in front of the patient's mouth and pivotably supported on the airway case such that it may pivot toward and away from the user's mouth (element 27 or element 59; element 59's position may be moved or pivoted about element 41c, to which it is attached on the side of the case – see figures 14 and 15).

Regarding claim 9, Yamamori further discloses the apparatus comprising an inlet member that is adapted to be inserted into at least one of the patient's nostrils (element 42) and having a passage for guiding exhaled gas to the airway passage (element 44; figure 13), with a vent hole (element 41b) communicating with the area external to the inlet member.

Regarding claim 17, Yamamori discloses an exhaled carbon dioxide gas sensor comprising a photo emitter (element 2); a photo receiver (element 3); and an airway adapter (element 1) supporting the two so that the light beam from the emitter is received by the receiver, where the adapter comprises an airway case (element 1) that is adapted to be disposed below a patient's nostrils (figures 3, 10, 11) and has an airway passage configured to extend across an optical axis of a light beam emitted from the sensor's light emitter at a position between the mouth and nostrils of the patient (element 4); and a mouth guide, adapted to be disposed in front of the patient's mouth and pivotably supported on the airway case such that it may pivot toward and away from the user's mouth(element 27 or element 59; element 59's position may be moved or pivoted about element 41c, to which it is attached on the side of the case – see figures 14 and 15).

Claim Rejections - 35 USC § 103

4. Claims 2, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamori in view of Cannon (US Patent Application Publication 2004/0003816).

Regarding claim 2, Yamamori discloses all the elements of the current invention, except for the mouth guide comprising a shaft member that is fitted into a hole in the airway case so that the mouth guide may pivot about the hole.

Cannon discloses a device comprising a mouth guide (element 12) and a shaft (element 24), wherein the shaft of the mouth guide is inserted into a hole in order to allow the mouth guide to pivot (Figure 1; paragraph [0023]), in order to increase the patient's comfort, since pivoting around a shaft is well known in the art. The examiner notes that the shaft of Cannon is not integrally molded as part of the mouth guide; however, the final product has the same structure, regardless of the method of formation, and therefore is not patentably distinguishable (see MPEP §2113). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the device of Yamamori, and comprised the pivoting mechanism with a shaft inserted into a hole about which it may pivot, as taught by Cannon, in order to increase the patient's comfort.

Regarding claim 4, Yamamori further discloses forming the mouth guide of a flexible or elastic material (paragraph [0097]).

Regarding claim 5, Yamamori in view of Cannon discloses all the elements of the claimed invention, as applied to Claim 2, except for the shaft member being disposed parallel to the patient's face, and permitting rotation about the shaft, perpendicular to the patient's face.

Cannon further discloses that the shaft member is disposed in a direction parallel to the patient's face (Figure 1), thereby permitting rotation about it in a direction

perpendicular to the patient's face (Figure 1), in order to increase the patient's comfort while wearing the apparatus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Yamamori and Cannon with the shaft member being disposed in a direction parallel to the patient's face and permitting rotation about the shaft in a direction perpendicular to the patient's face, as taught by Cannon, in order to increase the patient's comfort while wearing the apparatus.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamori in view of Cannon, as applied to claim 2 above, and further in view of Yang (US Patent 6739218).

Yamamori in view of Cannon discloses all the elements of the claimed invention except for the shaft member being formed of a flexible material and having a size no less than the size of the hole.

Cannon further teaches forming the shaft member no smaller than the size of the hole (figures 1, 2, 5, 6), so the hinge moves securely.

Yang teaches a device comprising a shaft member that fits into a hole to allow the device to pivot. Said shaft member (element 56) is formed of a flexible material (column 4, line 73), in order to increase the resilience of the component.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the apparatus of Yamamori in view of Cannon with a

flexible shaft, as taught by Yang that is sized no smaller than its hole, as taught by Cannon, so that the components are resilient and the hinge moves securely.

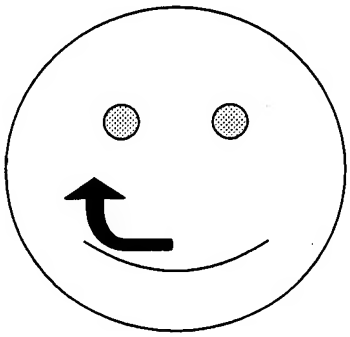
Allowable Subject Matter

6. Claims 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

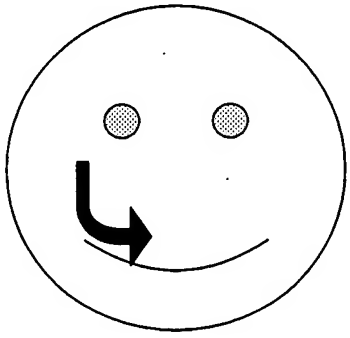
The prior art of record fails to anticipate or make obvious the structure of Claims 10-12, including, *inter-alia*, forming a vent hole at the junction between two tube inlet members that are adapted to be inserted into nostrils.

Response to Arguments

Applicant argues that Yamamori's mouth guide cannot be pivoted toward and away from a user's mouth. The Examiner disagrees – though it is true that Yamamori's guide does move in a lateral direction, it does so by rotating toward and away from the user's – that is, away from the mouth when rotated toward the cheekbone, and then back toward the mouth).



Away from the mouth



Toward the mouth

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen E. Toth whose telephone number is 571-272-6824. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, II can be reached on 571-272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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